

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method comprising effecting electroporation by displacing a sample across electric field lines of a spatially inhomogeneous electric field while the electric field is substantially constant in terms of magnitude, wherein the electric field is generated with electrodes that are continuously energized at least while the sample traverses the electric field, and wherein a polarity of the electric field is periodically reversed.

2. (Canceled)

3. (Original) The method of claim 1, the electric field being established by electrodes coupled to an AC source.

4. (Original) The method of claim 1, the electric field being established by electrodes having a peak power consumption not exceeding 150% of an average power consumption.

5. (Previously Presented) The method of claim 4, where the peak and average power consumptions are less than about 10 Watts.

6. (Original) The method of claim 1, the electric field being established by electrodes having a duty cycle greater than 50%.

7. (Currently Amended) A method for electroporating a sample, the method comprising: generating a spatially inhomogeneous electric field with a pair of electrodes; and displacing the pair of electrodes and a sample relative to one other while the electric field is substantially constant in terms of magnitude so that the sample is displaced across electric field lines for a time sufficient to effect electroporation; wherein the pair of electrodes are continuously energized at least during displacement of the pair of electrodes and the sample relative to one another; and wherein a polarity of the electric field is periodically reversed.
8. (Previously Presented) The method of claim 7, where the electrodes are fixed and the sample is displaced.
- 9-11. (Canceled)
12. (Previously Presented) The method of claim 7, where the electrodes are continuously energized by an AC source of approximately 100 to 150 volts and a frequency of approximately 10 to 60 Hertz.
13. (Original) The method of claim 12, where the AC source is accessed directly through a standard electrical wall outlet.
14. (Previously Presented) The method of claim 7, the electrodes having a peak power consumption not exceeding 150% of an average power consumption.
15. (Previously Presented) The method of claim 14, where the peak and average power consumptions are less than about 10 Watts.
16. (Original) The method of claim 7, the electrode having a duty cycle greater than 50%.
- 17-33. (Canceled)

34. (New) A method for electroporating a sample, the method comprising:
generating a spatially inhomogeneous electric field with a pair of electrodes; and
displacing the pair of electrodes and a sample relative to one other while the electric field
is substantially constant in terms of magnitude so that the sample is displaced
across electric field lines for a time sufficient to effect electroporation;
wherein the pair of electrodes are continuously energized at least during displacement of
the pair of electrodes and the sample relative to one another; and
wherein the sample is fixed and the electrodes are displaced.

35. (New) A method for electroporating a sample, the method comprising:
generating a spatially inhomogeneous electric field with a pair of electrodes; and
displacing the pair of electrodes and a sample relative to one other while the electric field
is substantially constant in terms of magnitude so that the sample is displaced
across electric field lines for a time sufficient to effect electroporation;
wherein the pair of electrodes are continuously energized at least during displacement of
the pair of electrodes and the sample relative to one another; and
wherein the sample and electrodes are displaced.